

RJM Corporation  
Ten Roberts Lane  
Ridgefield, CT 06877  
203 438-6198



October 10, 1991

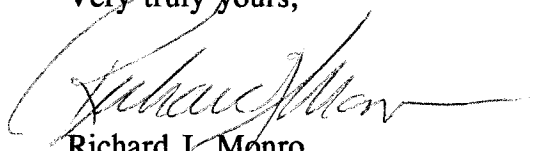
Mr. Aaron Nissen  
Intermountain Power Service Corporation  
850 West Brush Wellman Road  
Delta, UT 84624

Ref: View Graphs  
10/15/91 Meeting

Dear Aaron:

Here are the view graphs for Tuesday's meeting. After you have reviewed them, call me and we will discuss them.

Very truly yours,



Richard J. Monro  
President

RJM/sv  
Ipsecgraf.ltr

Enclosure

IP7\_003889

## INTERMOUNTAIN POWER PROJECT MODIFIED BACK PLATE

### DESIGN

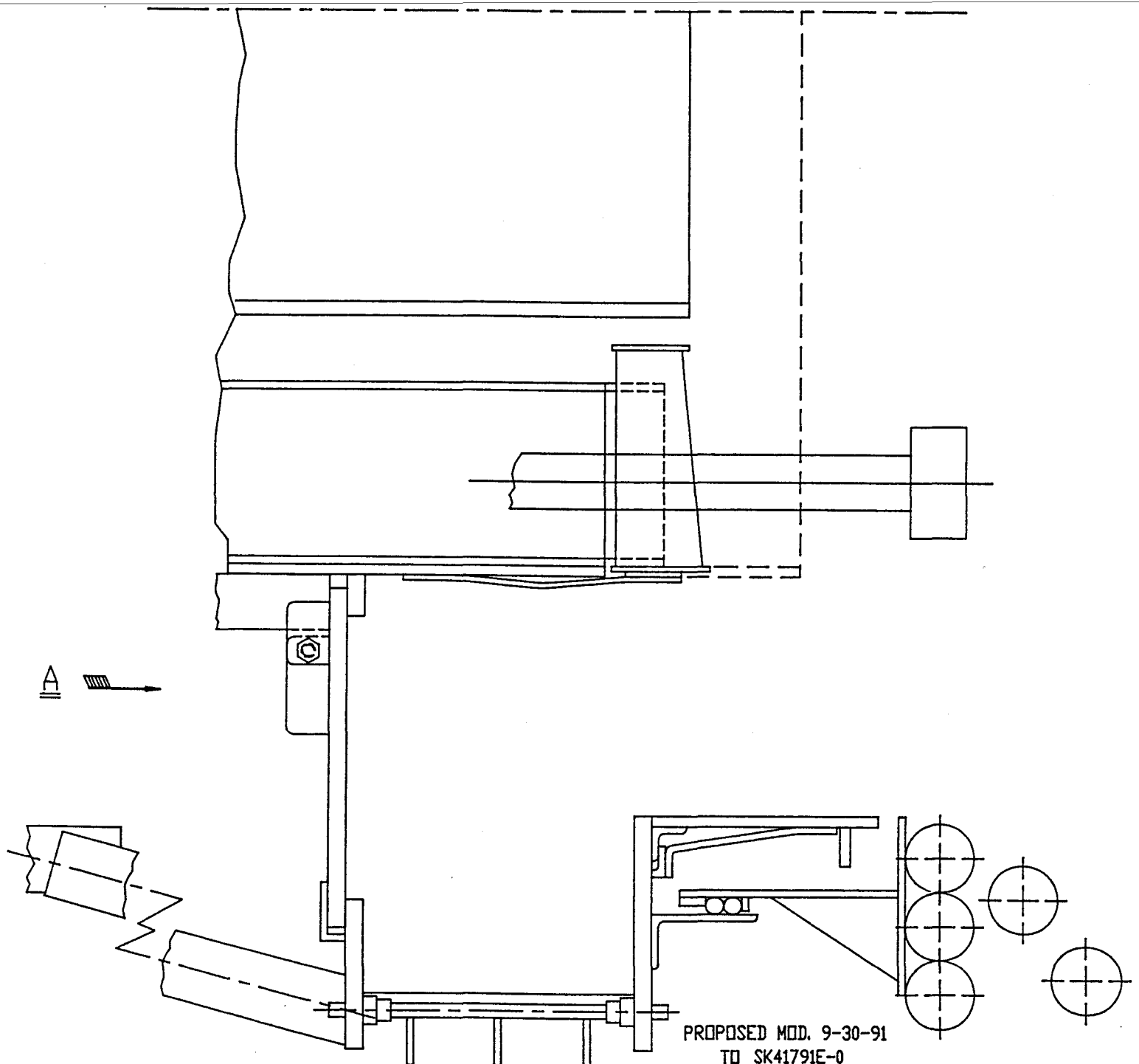
- o FOUR 90° SEGMENTED PANELS.
- o SLIP-FIT TO THE INNER SLEEVE AND OUTER REGISTER ASSEMBLY.
- o TANGENTIAL 3/4 INCH GAP BETWEEN PANELS.
- o OVERLAP PLATES BETWEEN PANELS.
- o RADIAL CENTERING BARS.

### ADVANTAGES

- o ELIMINATION OF PLATE CONING/WARPING.
- o THE GAPS ALLOW FOR 0.6 INCH THERMAL GROWTH AT THE INNER RADIUS.
- o OVERLAP PLATES PREVENT AIR-FLOW THROUGH GAPS.
- o RADIAL BARS TO CENTER PLATE DURING INSTALLATION AND TO PREVENT BINDING OF THE PLATE DURING THERMAL GROWTH.

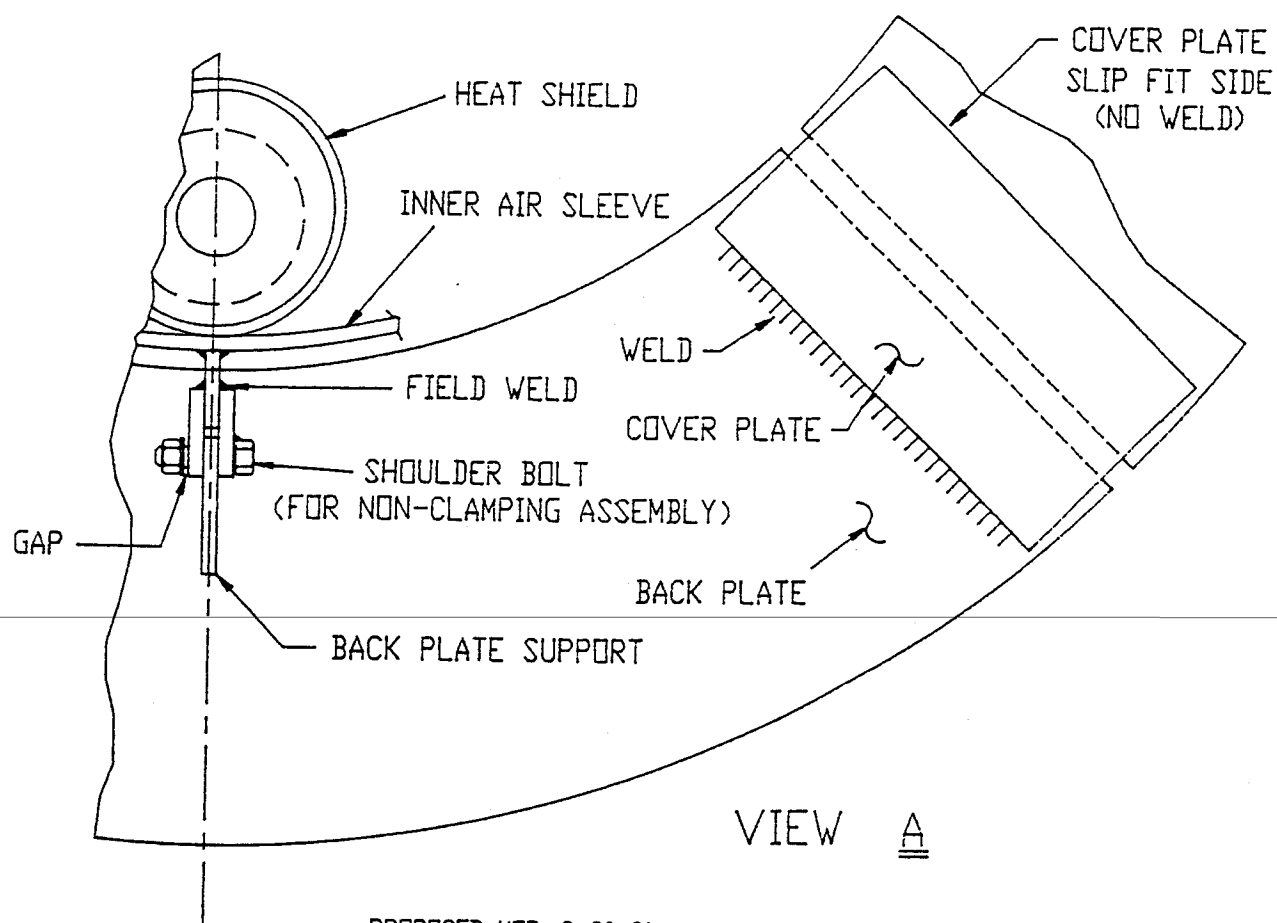
# INTERMOUNTAIN POWER PROJECT

## RECOMMENDED DESIGN



# INTERMOUNTAIN POWER PROJECT

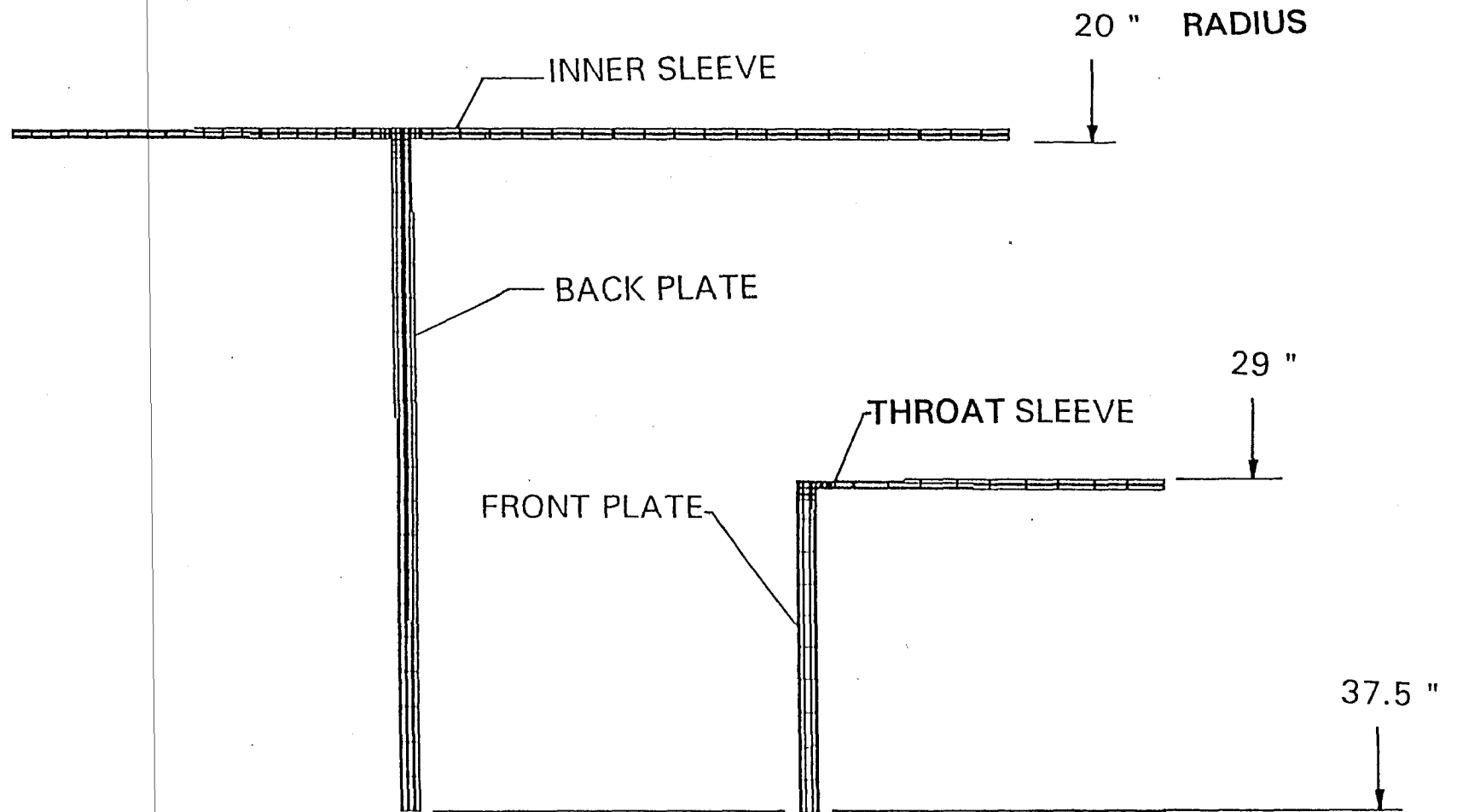
## SEGMENTED BACK PLATE



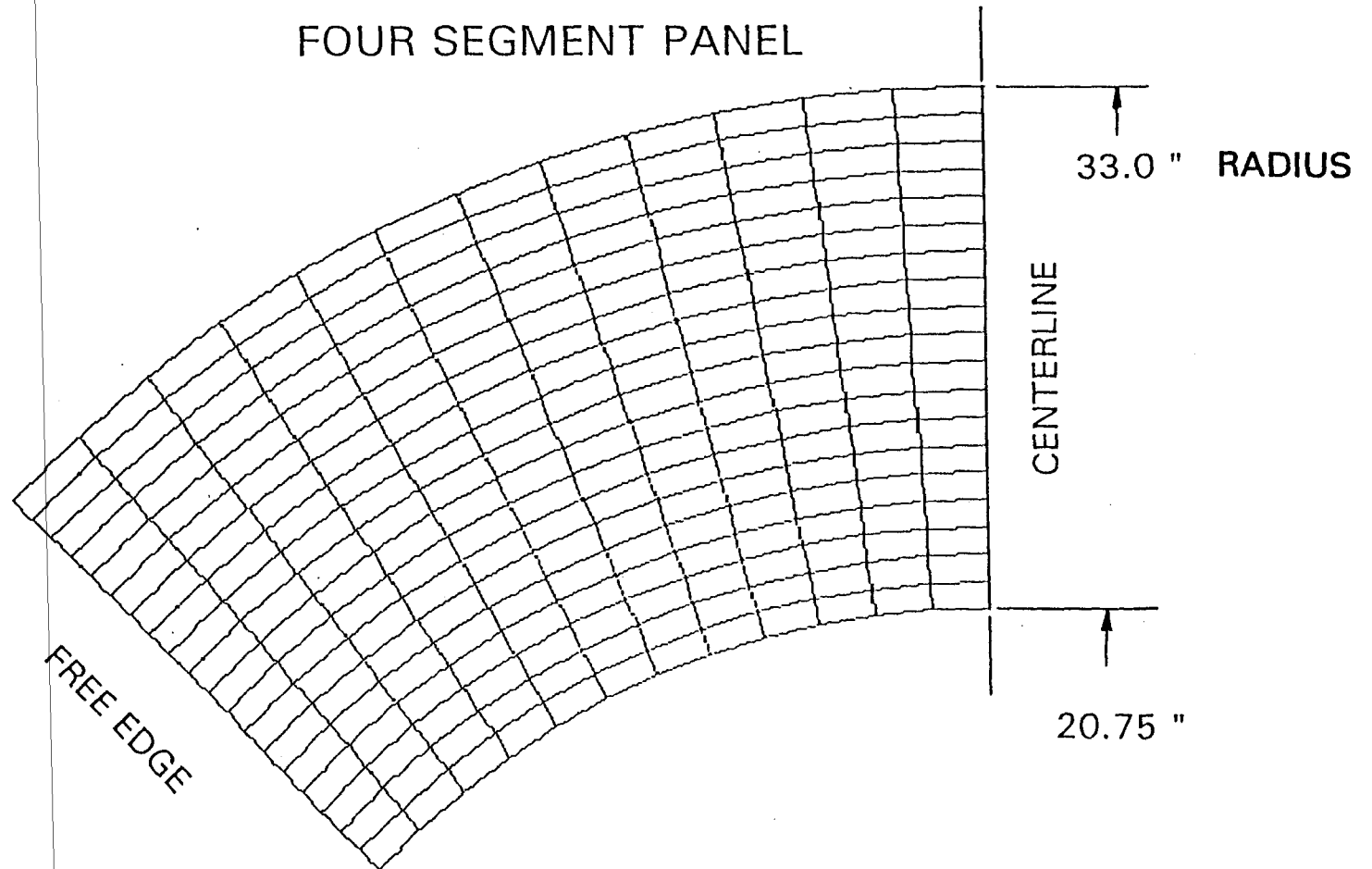
PROPOSED MOD. 9-30-91  
TO SK41791E-0

IP7\_003892

# FINITE ELEMENT MODEL: EXISTING DESIGN

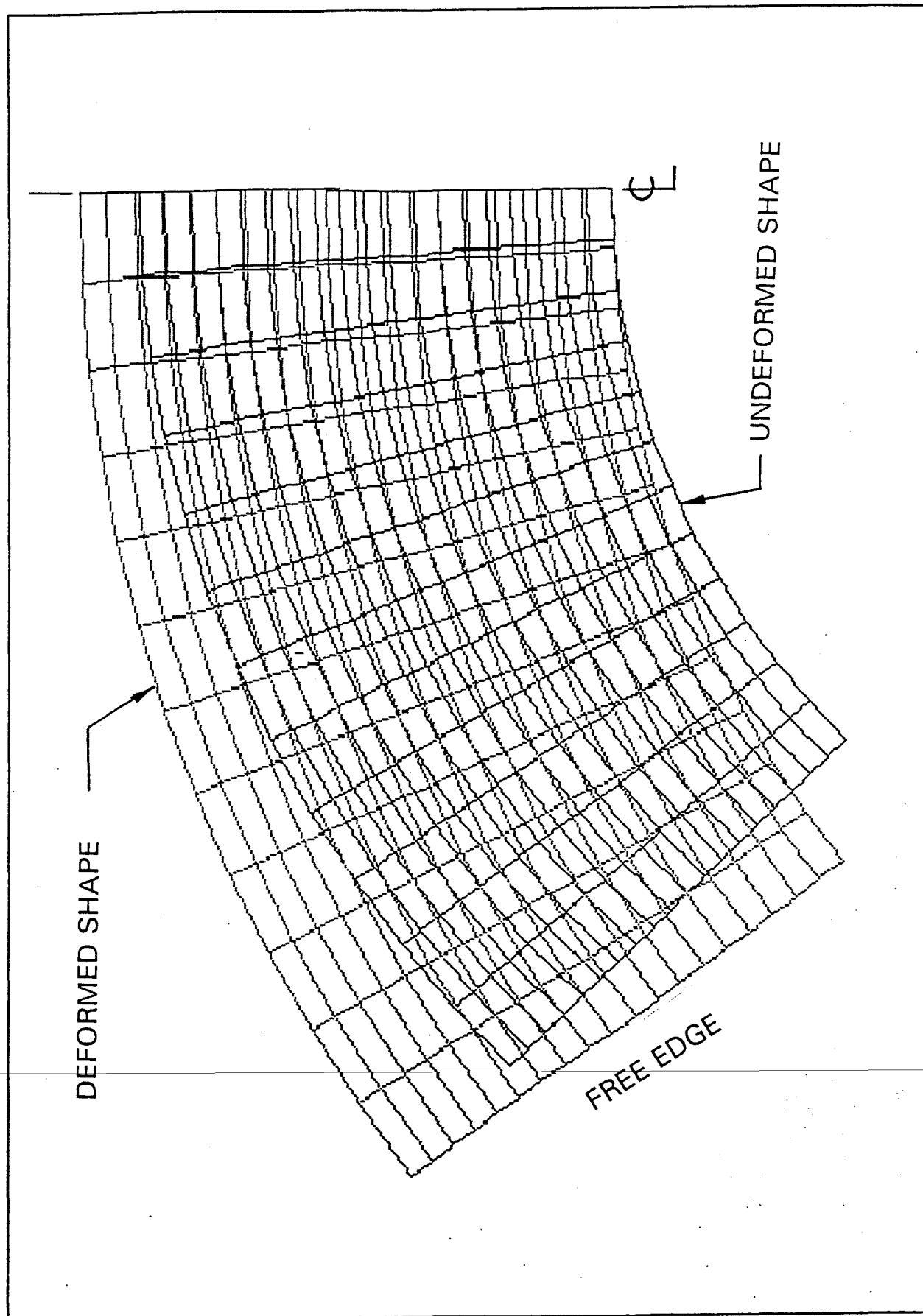


# FINITE ELEMENT MODEL: MODIFIED BACKPLATE



RECOMMENDED BACK PLATE DESIGN  
FOUR SEGMENT PANEL: OUT OF SERVICE

THERMAL GROWTH



# INTERMOUNTAIN POWER PROJECT SWIRLER

## DESIGN

- o 40 VANES WELDED TO INNER AND OUTER SHROUD
- o ATTACHES TO <sup>Inner Air Sleeve</sup> ~~COAL NOZZLE~~ BY 16 FLEX BAR SUPPORTS
- o INNER SHROUD INTERLOCK PINNED TO SEGMENTS

## ADVANTAGES

- o SEGMENTED DESIGN ALLOWS FOR THERMAL GROWTH BETWEEN THE OUTER SHROUD AND THE COAL NOZZLE
- o INTERLOCK PIN DESIGN PERMITS RADIAL AND TANGENTIAL THERMAL GROWTH WHILE CONSTRAINING AXIAL SEGMENT MOVEMENT





**IP7\_003897**

